

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

June 13, 2006

In re application of : SOLOMON, Irving
Serial No. : 10/710,411
Filed : July 8, 2004
Entitled : **DISPOSABLE ANIMAL DIAPER**
Examiner : Abbott, Yvonne Renee
Art Unit : 3644
Our File No. : 8868.4811

AMENDMENT

Mail Stop Non-Fee Amendment
Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

In response to the Examiner's Office Action dated April 19, 2006, this Amendment is submitted.

Amendments to the Claims begin on page 2 of this document.

Remarks begin on page 7 of this document.

Amendments to the Claims:

Please amend the claims as follows:

1. (Currently Amended) An easy-to-manufacture, easy-to-use disposable pet diaper comprising:

a lightweight upper portion;

an absorbent bottom portion;

means for securely attaching the diaper to the pet; and

layered means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body.

2. (Original) The pet diaper of claim 1, wherein the pet diaper comprises a one-piece construction.

3. (Original) The pet diaper of claim 1, wherein the means for attaching further comprises a left slit and a right slit on a bottom portion of the diaper.

4. (Original) The pet diaper of claim 1, wherein the means for attaching further comprises an elongated strip on each side of the upper portion of the diaper.

5. (Original) The pet diaper of claim 4, wherein the elongated strip is partially detachable from the diaper.

6. (Original) The pet diaper of claim 5, wherein the strips are passable through corresponding slits in the bottom portion of the diaper.

7. (Original) The pet diaper of claim 6, wherein the strips are capable of being fastened together.

8. (Original) The pet diaper of claim 1, further comprising means for holding

the diaper around the pet's tail.

9. (Original) The pet diaper of claim 1, wherein the upper portion comprises a soft layer and a plastic layer.

10. (Previously Amended) The pet diaper of claim 9, wherein the soft layer comprises fabric and the plastic layer comprises polyethylene.

11. (Previously Amended) The pet diaper of claim 1, wherein the bottom portion is at least partially rigid.

12. (Previously Amended) The pet diaper of claim 1, wherein the bottom portion comprises:

a central superabsorbent portion; and

left and right absorbent portions.

13. (Previously Amended) The pet diaper of claim 12, wherein the superabsorbent portion comprises:

a plastic layer;

a sodium polyacrylate layer; and

a soft layer.

14. (Original) The pet diaper of claim 13, wherein the polyacrylate layer lies between an upper means for storing liquid and a lower means for storing liquid.

15. (Previously Amended) The pet diaper of claim 14, wherein the upper means for storing and the lower means for storing are comprised of cellulose.

16. (Original) The pet diaper of claim 13, wherein the sodium polyacrylate is formed into elongated channels.

17. (Original) The pet diaper of claim 14, wherein the superabsorbent portion comprises glued layers.

18. (Original) The pet diaper of claim 13, wherein the left and right absorbent portions each comprise glued layers.

19. (Previously Amended) The pet diaper of claim 12, wherein the absorbent portion comprises:

- a plastic layer;
- a means for storing liquid; and
- a soft layer.

20. (Original) The pet diaper of claim 19, wherein the soft layer comprises a felt-like material.

21. (Previously Amended) The pet diaper of claim 17, wherein the means for storing are comprised of cellulose.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Currently Amended) An easy-to-manufacture, easy-to-use disposable pet diaper comprising:

a lightweight upper portion;

an absorbent bottom portion;

means for securely attaching the diaper to a pet, said means for attaching comprising:

a left slit and a right slit on a bottom portion of the diaper; and

an elongated strip on each side of the upper portion of the diaper to be inserted through said left slit and said right slit of the bottom portion;

means for holding the diaper around the pet's tail; and

layered means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body.

39. (Previously Added) The pet diaper of claim 38, wherein the pet diaper comprises a unitary, one-piece construction.

40. (Previously Added) The pet diaper of claim 38, wherein the elongated strip

on each side of the upper portion of the diaper comprises a left elongated strip and a right elongated strip connected to the upper portion of the diaper.

41. (Previously Added) The pet diaper of claim 38, wherein:

the left elongated strip of the upper portion of the diaper is inserted through the corresponding left slit of the bottom portion;

the right elongated strip of the upper portion of the diaper is inserted through the corresponding right slit of the bottom portion; and

the left and right elongated strips pulled to the back of the pet and are tied together or otherwise fastened to securely attach the diaper to the pet.

42. (Previously Added) The pet diaper of claim 41, wherein the elongated strip is partially detachable from the diaper.

43. (Previously Added) The pet diaper of claim 38, wherein the strips are passable through diagonally opposing, rather than corresponding, slits in the bottom portion of the diaper.

44. (Previously Added) The pet diaper of claim 43, wherein the strips are capable of being fastened together.

45. (Previously Added) The pet diaper of claim 38, wherein said means for holding the diaper around the pet's tail comprises an aperture passing through the upper portion of the diaper for accommodating said pet's tail, which will pass through said aperture.

REMARKS

Applicant wishes to thank the Examiner for the notice of allowable subject matter. Applicant has amended claims 1 and 38. Claims 22 through 37 are cancelled without prejudice.

I. REJECTION OF CLAIMS UNDER 35 U.S.C. § 102(b)

A. OHTA

Applicant respectfully traverses the Examiner's rejection of claims 1, 2, 4, and 8 under 35 U.S.C. § 102(b) as being unpatentable over Ohta, U.S. Patent No. 5,954,015. Applicant has amended claim 1 to delete the word "layered" from "layered means for absorbing." In light of this amendment, the Examiner has not demonstrated that the Ohta reference discloses the means for absorbing claimed by Applicant. The means for absorbing element of claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. Referring to paragraph [20] of the specification, Applicant discloses that the means for absorbing element of claim 1 comprises preferably "a plastic outer layer 40, a superabsorbent layer containing superabsorbent material such as cross-linked sodium polyacrylate 42, and a soft layer 44." See also Figure 4 of the present application. Applicant also discloses that "[t]he superabsorbent polyacrylate layer preferably lies between an upper means for storing liquid 46 and an outer means for storing liquid 48, such as cellulose or an equivalent material." Finally, Applicant discloses that the superabsorbent material is included in the diaper preferably in elongated channels that are oval-shaped in cross-section extending through the bottom portion of said diaper. These features of

Applicant's means for absorbing are not disclosed by the Ohta reference, which simply describes an animal diaper comprising (1) an inner permeable sheet, (2) an outer water-proof sheet, and (3) an absorbent material located between the permeable sheet and the water-proof sheet. See Ohta, claim 1, and column 2, lines 61-65. Clearly, these elements are not the same as those described by Applicant's specification with respect to Applicant's means for absorbing in claim 1. Thus, the means for absorbing element of claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. In view of the descriptions of the means for absorbing contained in Applicant's specification, the Examiner has not demonstrated that the Ohta reference discloses the means for absorbing as claimed by Applicant. The Examiner's rejection of claim 1 under 35 U.S.C. § 102(b) cannot be sustained.

With respect to claim 1, the Examiner also has not shown that the Ohta reference discloses a means for attaching as described by Applicant's specification. The means for attaching element of claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. Referring to paragraph [17] of Applicant's specification, the application describes the means for attaching preferably as "strips [that] are able to be tied together. . . [and] by having the strips 16, 18 tied together, the diaper does not require Velcro or any adhesive to be placed on the diaper." Applicant recites this as an advantage for lower manufacturing costs. Moreover, paragraph [18] of Applicant's specification continues to disclose the manner in which the strips 16 and 18 are passed through slits 24 and 26 in the bottom portion of the diaper so that "the diaper may be cinched across the pet's back." See

paragraph 18 of Applicant's specification and Figures 1 and 2. The Ohta reference describes a belt (8) and pieces of adhesive tape (9) as means for attaching the Ohta diaper to an animal. See Ohta, column 3, lines 1-5. The Ohta specification does not provide any further explanation or disclosure concerning the belt and pieces of adhesive tape, however, Figure 1 of Ohta illustrates the pieces of adhesive tape (9) affixed by adhesion to belt (8) and the diaper (1) of that invention. Ohta does not disclose that the pieces of adhesive tape pass through slits to be tied or cinched above the back of the pet wearing the diaper. Therefore, Applicant's means for attaching, as described in Applicant's specification, differs markedly from the components of the means for attaching disclosed in Ohta. For these reasons, the Examiner's rejection of claim 1 under 35 U.S.C. § 102(b) cannot be sustained.

Dependent claims 2, 4, and 8 ultimately depend upon independent claim 1, and thus, incorporate by reference all of the elements and limitations of independent claim 1. 35 U.S.C. § 112, fourth paragraph. This includes the novel feature disclosed in claim 1 of a means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body. As explained above, the means for absorbing, as construed by reference to Applicant's specification, is not disclosed by the Ohta reference. Therefore, the Examiner's rejection of Applicant's claims 2, 4, and 8 under 35 U.S.C. § 102(b) cannot be sustained. Applicant respectfully requests that the Examiner withdraw this rejection and allow claims 1, 2, 4, and 8.

B. KELLY

Applicant respectfully traverses the Examiner's rejection of claims 1, 3-10, 38, and

40-45 under 35 U.S.C. § 102(b) as being unpatentable over Kelly, U.S. Patent No. 5,555,847. Applicant has amended claims 1 and 38 to delete the word “layered” from “layered means for absorbing.” The means for absorbing element of amended claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. The Examiner has not demonstrated that the Kelly reference discloses the means for absorbing described in Applicant’s amended claim 1 and 38 and specification. Referring to paragraph [20] of the specification, Applicant discloses that the means for absorbing element of claims 1 and 38 comprises preferably “a plastic outer layer 40, a superabsorbent layer containing superabsorbent material such as cross-linked sodium polyacrylate 42, and a soft layer 44.” See also Figure 4 of the present application. Applicant also discloses that “[t]he superabsorbent polyacrylate layer preferably lies between an upper means for storing liquid 46 and an outer means for storing liquid 48, such as cellulose or an equivalent material.” Finally, Applicant discloses that the superabsorbent material is included in the diaper preferably in elongated channels through the bottom portion of said diaper which are oval-shaped in cross-section.

These features of the means for absorbing are not disclosed by the Kelly reference, which simply describes the diaper of that invention as comprising (1) a sheet of thin, plastic, water-proof polyethylene, (2) a thick pad of conventional super-absorbent sponge or padding material, and (3) a cover of thin fabric that is porous and permeable. See Kelly, column 2, lines 51-61. These elements are not the same as those described by Applicant’s specification with respect to Applicant’s means for absorbing element in claims 1 and 38.

Thus, Applicant's means for absorbing of claims 1 and 38 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. The Examiner has not demonstrated that the Kelly reference discloses the means for absorbing element as claimed and described by Applicant. The Examiner's rejection of claim 1 under 35 U.S.C. § 102(b) cannot be sustained.

Dependent claims 3 through 10 ultimately depend upon amended independent claim 1, and thus, incorporate by reference all of the elements and limitations of independent claim 1. 35 U.S.C. § 112, fourth paragraph. Similarly, dependent claims 40 through 45 ultimately depend upon amended independent claim 38, and thus, incorporate by reference all of the elements and limitations of independent claim 38. Id. This includes the novel feature disclosed in claims 1 and 38 of the means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body. As explained above, the means for absorbing, as construed by reference to Applicant's specification, is not disclosed by the Kelly reference. Therefore, the Examiner's rejection of Applicant's claims 3 through 10 and 40 through 45 under 35 U.S.C. § 102(b) cannot be sustained. Applicant respectfully requests that the Examiner withdraw this rejection and allow said claims.

C. LOWMAN

Applicant respectfully traverses the Examiner's rejection of claims 1, 2, 4, and 8 under 35 U.S.C. § 102(b) as being unpatentable over Lowman, U.S. Patent No. 5,234,421. Applicant has amended claim 1 to delete the word "layered" from "layered means for absorbing." The Examiner has not demonstrated that the Lowman reference discloses the

means for absorbing claimed by Applicant. The means for absorbing element of amended claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. Referring to paragraph [20] of the specification, Applicant discloses that the means for absorbing of claim 1 comprises preferably "a plastic outer layer 40, a superabsorbent layer containing superabsorbent material such as cross-linked sodium polyacrylate 42, and a soft layer 44." See also Figure 4 of the present application. Applicant also discloses that "[t]he superabsorbent polyacrylate layer preferably lies between an upper means for storing liquid 46 and an outer means for storing liquid 48, such as cellulose or an equivalent material." Finally, Applicant discloses that the superabsorbent material is included in the diaper preferably in elongated channels through the bottom portion of said diaper which are oval-shaped in cross-section.

These features of Applicant's means for absorbing are not disclosed by the Lowman reference, which simply describes a diaper for a dog comprising (1) an outer ply that is a water-proof, thin layer and is preferably a thin-sheet plastic, (2) an absorbent layer, which is formed of multiple plies of absorbent material woven or felted in the fashion of mesh, comprising a Weyerhaeuser product made primarily of wood fluff pulp and other cellulose tissue, and also may include a cornstarch filled cover, and (3) a thin, porous exposed surface ply. See Lowman, column 4, lines 15-40, 64-68, and column 5, line 1. The absorbent layer of Lowman is disposed between the outer ply and the exposed surface ply. Clearly, these elements are not the same as those described by Applicant's specification with respect to Applicant's means for absorbing in claim 1. Thus, the means

for absorbing of Applicant's claim 1 must be construed to cover the corresponding structure and material described in the specification and equivalents thereof. The Examiner has not demonstrated that the Lowman reference discloses the means for absorbing as claimed by Applicant. The Examiner's rejection of claims 1, 2, 4, and 8 under 35 U.S.C. § 102(b) cannot be sustained.

Dependent claims 2, 4, and 8 ultimately depend upon amended independent claim 1, and thus, incorporate by reference all of the elements and limitations of independent claim 1. 35 U.S.C. § 112, fourth paragraph. This includes the novel feature disclosed in claim 1 of the means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body. As explained above, the means for absorbing, as construed by reference to Applicant's specification, is not disclosed by the Lowman reference. Therefore, the Examiner's rejection of Applicant's claims 2, 4, and 8 under 35 U.S.C. § 102(b) cannot be sustained. Applicant respectfully requests that the Examiner withdraw this rejection and allow said claims.

II. REJECTION OF CLAIM 11 UNDER 35 U.S.C. § 103(a)

Applicant respectfully traverses the Examiner's rejection of claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Ohta, U.S. Patent No. 5,954,015, in view of Igaue et al., U.S. Patent No. 5,114,420. Applicant has amended claim 1 to delete the word "layered" from "layered means for absorbing." In light of this amendment, the Examiner has not demonstrated that the Ohta reference discloses the means for absorbing and means for attaching claimed by Applicant. Dependent claim 11 ultimately depends upon independent claim 1, and thus, incorporates by reference all of the elements and limitations

of independent claim 1. 35 U.S.C. § 112, fourth paragraph. This includes the novel feature disclosed in claim 1 of a means for absorbing generally liquid discharge of the pet, whereby the diaper closely conforms to the contours of the pet's body. The means for absorbing element of claim 1 must be construed to cover the corresponding structure and material described in Applicant's specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. Referring to paragraph [20] of the specification, Applicant discloses that the means for absorbing of claim 1 comprises preferably "a plastic outer layer 40, a superabsorbent layer containing superabsorbent material such as cross-linked sodium polyacrylate 42, and a soft layer 44." See also Figure 4 of the present application. Applicant also discloses that "[t]he superabsorbent polyacrylate layer preferably lies between an upper means for storing liquid 46 and an outer means for storing liquid 48, such as cellulose or an equivalent material." Finally, Applicant discloses that the superabsorbent material is included in the diaper preferably in elongated channels through the bottom portion of said diaper which are oval-shaped in cross-section. These features of the means for absorbing are not disclosed by the Ohta or Igaue references.

The Igaue reference simply describes a diaper for humans comprising (1) a liquid-permeable topsheet comprising a fibrous nonwoven fabric or a porous plastic film, (2) a liquid-impermeable backsheet comprising plastic film, a laminate sheet consisting of said plastic film, and fibrous nonwoven fabric, and (3) an absorbent body interposed between said topsheet and said backsheet. See Igaue et al., claim 1; column 3, lines 33-36; and column 4, lines 19-22. The absorbent layer of Igaue "may be, for example, of mat-like body consisting of fluff pulp mixed or not mixed with high-absorptivity polymer particles,

covered at least on upper and lower sides with water-permeable sheets such as tissue paper and hydrophobic nets.” See Igaue et al., column 4, lines 28-33. These elements are not the same as those described by Applicant’s specification with respect to Applicant’s means for absorbing element in claim 1 of the present application. As explained above, the means for absorbing, as construed by reference to Applicant’s specification, is not disclosed by the Ohta or Igaue references. Thus, the Examiner’s rejection of claim 11 under 35 U.S.C. § 103(a) cannot be sustained.

In addition, the Examiner has not demonstrated that the Ohta reference discloses a means for attaching as described by Applicant’s specification. Dependent claim 11 ultimately depends upon independent claim 1, and thus, incorporates by reference all of the elements and limitations of independent claim 1. 35 U.S.C. § 112, fourth paragraph. This includes the novel feature disclosed in claim 1 of a means for attaching. The means for attaching element of claim 1 must be construed to cover the corresponding structure and material described in Applicant’s specification and equivalents thereof. 35 U.S.C. § 112, sixth paragraph. Referring to paragraph [17] of Applicant’s specification, the application describes the means for attaching preferably as “strips [that] are able to be tied together. . . [and] by having the strips 16, 18 tied together, the diaper does not require Velcro or any adhesive to be placed on the diaper.” Applicant recites this as an advantage for lower manufacturing costs. Moreover, paragraph [18] of Applicant’s specification continues to disclose the manner in which the strips 16 and 18 are passed through slits 24 and 26 in the bottom portion of the diaper so that “the diaper may be cinched across the pet’s back.” See paragraph 18 of Applicant’s specification and Figures 1 and 2.

The Ohta reference describes a belt (8) and pieces of adhesive tape (9) as means for attaching the Ohta diaper to an animal. See Ohta, column 3, lines 1-5. The Ohta specification does not provide any further explanation or disclosure concerning the belt and pieces of adhesive tape, however, Figure 1 of Ohta illustrates the pieces of adhesive tape (9) affixed by adhesion to belt (8) and the diaper (1) of that invention. Ohta does not disclose that the pieces of adhesive tape pass through slits to be tied or cinched above the back of the pet wearing the diaper. The Igaue reference also describes tape fasteners (27) having pressure sensitive adhesive for securing the ends of the tape fasteners to the front side of the Igaue diaper. See Igaue et al., column 4, lines 13-18. Therefore, Applicant's means for attaching, as described in Applicant's specification, differs markedly from the components of the means for attaching disclosed in the Ohta and Igaue references. For these reasons, the Examiner's rejection of claim 11 under 35 U.S.C. § 103(a) cannot be sustained.

Finally, in claim 11, Applicant claims that the bottom portion of the diaper is at least partially rigid. As illustrated in Figure 2 of the present application, the bottom portion 14 of Applicant's invention comprises a central superabsorbent portion 30 and left and right absorbent portions 32 and 34. Therefore, all three of these components 30, 32, and 34 of the bottom portion are at least partially rigid. The Ohta reference discloses an absorbent (3) sandwiched between two sheets of absorbent paper (2), one sheet being attached to an outer water-proof sheet (6) and the other to an inner permeable sheet (7). See Ohta, column 2, lines 60-66, and Figure 4. On page 5 of the Office Action, the Examiner states that the Ohta reference does not disclose a bottom portion that is at least partially rigid. The Igaue

reference teaches a semi-rigid absorbent body (13) that extends nearly the entire length of the diaper in that invention. See Igaue et al., column 4, lines 33-35, and Figure 7. Moreover, the side flaps (14) disclosed in the Igaue reference are components of the rear portion of that disposable baby diaper but are not semi-rigid as are the left and right absorbent portions 32 and 34 as further defined by Applicant's claim 11. Therefore, Applicant's invention is not obvious in view of the two prior art references cited by the Examiner.

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Respectfully submitted,

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